

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/707,747A

Source: FWO

Date Processed by STIC: 8/3/05

# ***ENTERED***



IFWO

## RAW SEQUENCE LISTING

DATE: 08/03/2005

PATENT APPLICATION: US/10/707,747A

TIME: 15:05:14

Input Set : D:\Sequence Listings.ST25.txt

Output Set: N:\CRF4\08032005\J707747A.raw

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3 <110> APPLICANT: University of South Florida
5 <120> TITLE OF INVENTION: DETECTION OF RED TIDE ORGANISMS BY NUCLEIC ACID
AMPLIFICATION
7 <130> FILE REFERENCE: 1372.120PCR
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/707,747A
C--> 9 <141> CURRENT FILING DATE: 2004-01-08
9 <160> NUMBER OF SEQ ID NOS: 8
11 <170> SOFTWARE: PatentIn version 3.2
13 <210> SEQ ID NO: 1
14 <211> LENGTH: 20
15 <212> TYPE: DNA
16 <213> ORGANISM: artificial sequence
18 <220> FEATURE:
19 <223> OTHER INFORMATION: Forward primer designed to amplify and detect the 91-bp
region of
20     the rbcL gene of K. brevis.
22 <400> SEQUENCE: 1
23 tgaaacgtta ttgggtctgt                                20
26 <210> SEQ ID NO: 2
27 <211> LENGTH: 22
28 <212> TYPE: DNA
29 <213> ORGANISM: artificial sequence
31 <220> FEATURE:
32 <223> OTHER INFORMATION: Reverse primer designed to amplify and detect the 91-bp
region
33     of the rbcL gene specific K. brevis.
35 <400> SEQUENCE: 2
36 aggtacacac ttctgtaa ta                                22
39 <210> SEQ ID NO: 3
40 <211> LENGTH: 19
41 <212> TYPE: DNA
42 <213> ORGANISM: artificial sequence
44 <220> FEATURE:
45 <223> OTHER INFORMATION: Fluorogenic probe designed to amplify and detect the 91-bp
46     region of the rbcL gene specific K. brevis.
48 <400> SEQUENCE: 3
49 ttaaccttag tctcgggta                                19
52 <210> SEQ ID NO: 4
53 <211> LENGTH: 19
54 <212> TYPE: DNA
55 <213> ORGANISM: artificial sequence
57 <220> FEATURE:
58 <223> OTHER INFORMATION: Real Time NASBA forward primer for the marker region of rbcL
gene

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59           specific to K. brevis.  
61 <400> SEQUENCE: 4  
62 acgttattgg gtctgtgta

19

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of

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65 <210> SEQ ID NO: 5
66 <211> LENGTH: 50
67 <212> TYPE: DNA
68 <213> ORGANISM: artificial sequence
70 <220> FEATURE:
71 <223> OTHER INFORMATION: Reverse primer for real time NASBA to detect the marker region
    the rbcL gene specific to K. brevis.
72
74 <400> SEQUENCE: 5
75 aattctaata cgactcacta tagggagaag gtacaçactt tcgtaaacta 50
78 <210> SEQ ID NO: 6
79 <211> LENGTH: 33
80 <212> TYPE: DNA
81 <213> ORGANISM: artificial sequence
83 <220> FEATURE:
84 <223> OTHER INFORMATION: Molecular beacon used for real time NASBA assay.
86 <400> SEQUENCE: 6
87 cgatcgctta gtctcgggtt attttttcga tcg 33
90 <210> SEQ ID NO: 7
91 <211> LENGTH: 19
92 <212> TYPE: DNA
93 <213> ORGANISM: artificial sequence
95 <220> FEATURE:
96 <223> OTHER INFORMATION: PCR primer set was designed with sequence data from Karenia
97 mikimotoi (GenBank accession no. AB034635) by modifying existing
98 chromophyte rbcL primers in order to amplify a 554-bp region
99 (approximately one-third) of Karenia's rbcL gene (forward
102 <400> SEQUENCE: 7
103 atgatgaraa yattaactc 19
106 <210> SEQ ID NO: 8
107 <211> LENGTH: 21
108 <212> TYPE: DNA
109 <213> ORGANISM: artificial sequence
111 <220> FEATURE:
112 <223> OTHER INFORMATION: PCR primer set was designed with sequence data from Karenia
113 mikimotoi (GenBank accession no. AB034635) by modifying existing
114 chromophyte rbcL primers in order to amplify a 554-bp region
115 (approximately one-third) of Karenia's rbcL gene (reverse
118 <400> SEQUENCE: 8
119 atttgtcccg cattgattcc t 21

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**VERIFICATION SUMMARY**

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L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date